CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Tongue River Electric Powerline to BNSF Service.
Proposed Implementation Date:	2014
Proponent:	Tongue River Electric Coop.
Location:	T10N R54E S15
County:	Prairie

I. TYPE AND PURPOSE OF ACTION

Tongue River Electric Coop. (Henceforth referred to as the proponent) have requested to build a single phase, overhead power line on the State Trust land mentioned above. The power line will connect to an existing BNSF installation that measures the heat of the axels as trains travel over it and flags the axels that are too hot and could start a fire on the right of way. This project would utilize heavy equipment to install power-poles, guy wires, and anchors. The project will be located in T10N R54E S15 in Prairie County.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The proponent has submitted the proper documentation to request this project. The ELO staff has conducted a field review on the project on January 23, 2014. The proponent has been in touch with the DNRC and the surface lessees to discuss potential impacts; surface lessee settlement of damages has been received.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

If alternative B is selected the Prairie County Conservation District will need to be notified and proper permits obtained to do any disturbance at O'Fallon creek.

3. ALTERNATIVES CONSIDERED:

Alternative A- Allow the proponent to conduct the development of overhead facilities on the parcel of State Trust Land

Alternative B - Allow the proponent to conduct the development of below ground facilities on the parcel of State Trust Land.

Alternative C- No action

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

-Soil composition is varied throughout the project. Soil types include shallow, shallow with clay, and clayey. Major disturbance can be mitigated through the exclusion of heavy equipment on some areas of trust land in which the soils are excessively compactable or fragile. Heavy equipment will not be allowed into any riparian zone, sub-irrigated, reservoir, or stream area on the project. Equipment will also not be allowed in steeper

topography or any area where the soil structure is fragile. Some soil compaction may take place on areas where heavy equipment will be operated.

Alternative A- Some soil disturbance may take place through the use of heavy equipment drilling holes for power-poles. Any disturbance would be minimal and recover in time.

Alternative B- Some soil disturbance may take place through the use of a trencher digging and setting the line underground. Disturbance would be minimal depending upon the width of the trench, but should be minimal and recover in time.

Alternative C- No impacts on soil quality, stability or moisture.

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5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

In this tract O'Fallon Creek runs through part of this section where the proposed power line will run. Water quality will be maintained by excluding access to any area where ground or surface water could potentially be disturbed. All equipment will be kept out of rivers, wetlands, sub irrigated ground or any area where water quality, quantity or distribution could be affected.

Alternative A- The overhead line will span the creek where the poles and anchor wires will not affect the stream bed or be within the flood zone. Equipment will utilize an existing crossing of the stream to get from one side to the other.

Alternative B- The underground line would have to be bored under O'Fallon creek, there would have to be a certain set back from the stream as to not disturb the stream bed. Proper permits will be completed and approved, and stipulations would be set before any work is to commence.

Alternative C-Water quality would not be affected.

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6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Alternative A- Pollutants and particulates may be increased during the project. After the completion of the project pollutant and particulate levels should return to normal.

Alternative B- Pollutants and particulates may be increased during the project. After the completion of the project pollutant and particulate levels should return to normal.

Alternative C- Air quality would not be affected.

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7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

There is no evidence of rare plants or cover types in the scope of the project. Current plant species which occupy the construction area include Western Wheatgrass (Agropyron Smithii), Green Needlegrass (Stipa Viridula), Prairie Sandreed (Calamovilfa longifolia), Needle and Thread (Stipa comata), Prairie Junegrass (Koleria pyramidata), Blue Grama (Bouteloua gracilis), Big Sagebrush (Artemisia tridentata), Silver Sagebrush (Artemisia cana), Fringed Sagewort (Artemisia frigida), Broom Snakeweed (Gutierrezia sarothrae), Downy Brome (Bromus tectorum) and Japanese Brome (Bromus japonicus).

Alternative A- Vegetation communities may be affected by this project. The use of heavy equipment has the potential to damage some areas of the plant community. This may come from the vegetation being compacted by heavy equipment, and by the drilling holes for the power poles.

Alternative B- Vegetation communities may be affected by this project. The use of heavy equipment has the potential to damage some areas of the plant community. This may come from the vegetation being dug up while trenching and then compacted by heavy equipment.

Alternative C- Vegetation communities would not be affected.

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8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Various species inhabit the general project area including Whitetail and Mule Deer, Elk, Antelope, various Raptor species, various rodents, rabbits, reptiles, sage grouse and other upland game bird species and others. Given the short duration of the project the inherent mobility of most of these species minimal impacts are anticipated with the exception of potential impact to sage grouse.

Alternative A- The installation of overhead power lines and power poles has the potential to negatively impact the sage grouse populations by providing perch opportunities for predatory birds as well as creating a potential collision hazard for sage grouse themselves. These impacts will be significantly reduced with the requirement of mitigation measures of raptor perch deterrents placed on power poles and power line markers placed on the transmission lines to increase the visibility of those lines therefore reducing the chance of collisions. Timing restrictions for the project will also be enforced; there will be no work done between March 15 and July 15.

Alternative B- Trenching of the underground line has the potential to negatively impact sage grouse habitat. This negative impact would be mitigated through the use of trenching methods that disturb a minimal amount of vegetation, the short duration of the disturbance and subsequent recovery of disturbed areas. Timing restrictions for the project will also be enforced, there will be no work done between March 15 and July 15.

Alternative C- There would be no disruption to the wildlife that inhabits the area.

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9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

A search of the Montana Natural Heritage Database shows that Sage Grouse are listed as species of concern in the general proposed project area. There is an active sage grouse lek that has been recorded approximately ½ mile away from where the project will take place. The proposed project occurs in General Sage Grouse habitat as defined and mapped in the "Greater Sage-Grouse Habitat Conservation Strategy". The adopted strategy generally discourages new overhead power lines in general sage grouse habitat unless mitigation measures are taken to lessen potential impact to sage grouse populations and habitat. The strategy recommends adopting mitigation measures identified in the Avian Power Line Interaction Committee guidelines when new overhead power lines must be located within two miles of important breeding, brood-rearing, and winter habitat.

Alternative A- The installation of overhead power lines and power poles has the potential to negatively impact the sage grouse populations by providing perch opportunities for predatory birds as well as creating a potential collision hazard for sage grouse themselves. These impacts will be significantly reduced with the required adoption and implementation of mitigation measures found in the Avian Power Line Interaction Committee Guidelines. These required mitigation measures include the placement of raptor perch deterrents on power poles and power line markers placed on the transmission lines to increase the visibility of those lines therefore reducing the chance of collisions. Timing restrictions for the project will be also be enforced, there will be no work done between March 15 and July 15.

Alternative B- Trenching of the underground line has the potential to negatively impact sage grouse habitat. This negative impact would be mitigated through the use of trenching methods that disturb a minimal amount of vegetation, the short duration of the disturbance and subsequent recovery of disturbed areas. Timing restrictions for the project will be also be enforced, there will be no work done between March 15 and July 15.
Alternative C- No Impacts Expected

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

Alternative A- No historical, archaeological, or paleontological resources recorded on this tract. No impacts expected.

Alternative B- No historical, archaeological, or paleontological resources recorded on this tract. No impacts expected.

Alternative C- No historical, archaeological, or paleontological resources recorded on this tract. No impacts expected.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A- The aesthetics will be affected by the installation of the power line and line markers, but due to the location of the tract effects will be minimal.

Alternative B- Due to the short duration and isolated area of the project the aesthetics will be affected by trenching the line in, but due to the location of the tract effects will be minimal, and would recover in time.

Alternative C- Aesthetics would not be affected.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Alternative A- Due to the size and limited amount of time in use, there will be minimal amounts of energy used.

Alternative B- Due to the size and limited amount of time in use, there will be minimal amounts of energy used.

Alternative C- No impacts expected

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Montana Sage Grouse Habitat Conservation Strategy

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A- There may be potential safety risks for laborers but the potential risk should be minimal with proper safety efforts. With the line being visible; breaks in the line would be easy to find and fix with very little disturbance and in a short amount of time.

Alternative B- There may be potential safety risks for laborers but the potential risk should be minimal with proper safety efforts. With the line being underground; if a short or break were to occur it would take significant time and resources to located and fix the line, requiring significantly more disturbance than at installation.

Alternative C- There may be potential safety risks to the surrounding population and additional personnel if overheated axels on the trains cause a wildfire in the area that may have been prevented with the implementation of the service.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Alternative A- It has potential to have a positive effect on industrial and commercial production.

Alternative B- It has potential to have a positive effect on industrial and commercial production.

Alternative C- It has potential to have a negative effect on the industrial and commercial production with the loss of livestock range, livestock, and infrastructure of the railroad in the event of a wild land fire caused by overheated axels.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Alternative A- This project has the potential to create extra jobs.

Alternative B- This project has the potential to create extra jobs.

Alternative C- This project does not have the potential to create extra jobs.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Alternative A- No Impacts Expected

Alternative B- No Impacts Expected

Alternative C- No Impacts Expected

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A- The project will allow for the maintenance of BNSF railroad utilities helping to prevent wildfires from overheated train axels. Overall this will be the most economically feasible alternative even with the increased cost of the perch deterrents and line markers. With the adoption and requirement of the mitigation measures found in the Avian Power Line Interaction Committee Guidelines the installation of the overhead power line will be in compliance with the Montana Sage-Grouse Habitat Conservation Strategy and long term impacts to sage grouse populations and habitats should be minimal. Return to the trust will be in the easement application fee, any additional return is not known at this time.

Alternative B- The project allow for the maintenance of BNSF railroad utilities helping to prevent wildfires from overheated train axels. With this alternative there would be the need to do two bores, one under O'Fallon Creek, and the other under the existing Burlington Northern rail line to get to the existing service. The additional cost of the boring as well as additional costs incurred with trenching the remainder of the transmission line would significantly increase the cost of the project. With this option the cost of the project would be approximately three times the cost of installation of an overhead line. Trenching of the transmission line may also increase the cost and timing of future repairs and maintenance of the line. The future maintenance of an underground line also has the potential to negatively impact sage grouse habitat resulting from additional disturbance occurs through the excavation required to repair and maintain the line. Return to the trust will be in the easement application fee, any additional return is not known at this time.

Alternative C- The no action alternative would result in the possibility of wildfires resulting from overheated axels on the trains causing a loss of general sage grouse habitat, loss of livestock range, loss of livestock, and significant risk to human life

EA Checklist Prepared By:	**Name:** Spurr Watson	**Date:** 2/27/2014
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative A

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The granting of the requested easement for the installation of an above ground power line should not result in significant impacts. The installation of this overhead power line will allow for the maintenance of BNSF railway utilities by allowing to the measurement of heat coming off the train axels in an effort to prevent wildland fires resulting from overheated axels. With the adoption and requirement of the mitigation measures found in the Avian Power Line Interaction Committee Guidelines as well as required timing restrictions of construction, the installation of the overhead power line will be in compliance with the Montana Sage-Grouse Habitat Conservation Strategy. The adoption of these and other mitigations should result in a cost effective project with no long term significant impacts anticipated.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:** Chris Pileski	
	Title: Area Manager; Eastern Land Office	
Signature: /s/ Chris Pileski		**Date**: 2/27/2014